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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,384	10/10/2000	Lin He	SP00-291	4601

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CORNING INCORPORATED  
SP-TI-3-1  
CORNING, NY 14831

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

5

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/685,384

Applicant(s)

HE ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 35-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

*Election/Restrictions*

1. Applicant's election without traverse of claims 1-34 in Paper No. 4 is acknowledged.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-2, 5-7, 9-11, 13-15, 17, 19, 21-28, appear to contain improper Markush groups. Examiner suggests using the language, --selected from the group consisting of-- and linking the group members with the inclusive language --and--.

Claims 29, 31-34, x is undefined in the formula and one skilled in the art would not be reasonably apprised of what the formula represents nor the metes and bounds of the claimed subject matter.

Claims 29, "the formula" lacks antecedent basis.  
In claim 3, 'up to 5%' is suggested; 'between zero' appears to contradict claim 1.  
*Claim Rejections - 35 USC § 102*

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dettling et al. 5,128,306.

Regarding claims 1, 29, Dettling '306 discloses a catalyst comprising a support comprising ceria and lanthana (see abstract and Example 1) wherein the support is impregnated with platinum (see column 10, lines 50-54), and honeycomb-type substrates (see column 8, line 10). *The intended use does not limit the catalyst; no actual difference in the material is seen.*

Regarding claims 2 and 5, Dettling '306 discloses 0.1g/cubic inch nickel (see column 13, lines 45-47; some claimed ranges include zero).

Regarding claims 3-4 and 33, Dettling '306 discloses 1% Pt and Pd (see column 10, line 57).

Regarding claims 6-28, Dettling '306 discloses 3% lanthana and baria (see column 15, lines 55-56 and column 17, lines 13-14; some claimed ranges include zero).

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Regarding claims 30-31, Dettling '306 discloses  $\text{La}_2\text{O}_3$  plus ceria (see column 7, line 10).

Regarding claim 32, Dettling '306 discloses manganese (see column 7, line 57).

Regarding claim 34, Dettling '306 discloses 1% Pt (see column 10, line 57), 3% lanthana (see column 15, lines 55-56 and column 17, lines 13-14), and manganese (see column 7, line 57).

7. Claims 1-34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nguyen et al. 5,895,636.

Regarding claims 1 and 29, Nguyen '636 discloses a catalytic composition comprising a support of alumina and lanthanum oxide (see column 5, lines 38-45 and column 6, lines 1-8), impregnated with platinum (see column 6, lines 15-18).

Regarding claims 2 and 5, Nguyen '636 discloses 5% barium as promoter (see column 5, lines 38-39, 47, and 53-54).

Regarding claims 3-4, and 33-34, Nguyen '636 discloses 4% platinum and palladium (see column 5, lines 50-51).

Regarding claims 6-28, Nguyen '636 discloses 5% lanthanum and barium oxides (see column 5, lines 38-39, 47, and 53-54).

Regarding claims 30-31, Nguyen '636 discloses lanthanum, neodymium, and cerium oxide (see column 5, lines 20 and 44-45).

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Regarding claim 32, Nguyen '636 discloses manganese (see column 6, line 2). *As before, no difference in the material is seen.*

**Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Euzen 5,899,679 discloses catalyst comprising an impregnated metal oxide, Pd, Pt, Ba, Mn, Mg, and Zn (abstract); Kato 4,537,873 discloses catalyst comprising titania, Mg, La, and Ce (abstract).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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EMJ

June 1, 2002

A handwritten signature in black ink, appearing to read "Stuart L. Hendrickson".

**STUART L. HENDRICKSON**  
**PRIMARY EXAMINER**